

DEFENSE LOGISTICS AGENCY

DEFENSE SUPPLY CENTER, COLUMBUS POST OFFICE BOX 3990 COLUMBUS, OH 43218-3990

IN REPLY DSCC-VAI June 22, 2004

MEMORANDUM FOR DLA/MILITARY DISTRIBUTION

SUBJECT: Initial Draft of A-A-59440 and nine slash sheets; See table for Project Numbers

A-A-59440	4820-0880-000
A-A-59440/001	4820-0881-000
A-A-59440/002	4820-0882-000
A-A-59440/003	4820-0853-000
A-A-59440/004	4820-0883-000
A-A-59440/005	4820-0868-000
A-A-59440/006	4820-0884-000
A-A-59440/007	4820-0885-000
A-A-59440/008	4820-0886-000
A-A-59440/009	4820-0887-000

The Initial drafts for these subject documents, dated 24 May, 2004, are now available for viewing and downloading from the DSCC-VA Web site:

http://www.dscc.dla.mil/Programs/MilSpec/DocSearch.asp

Major changes to these documents involves a complete rewrite and use of manufacturer's part numbers from Certificates of Compliances (CoC). CoC's have been mailed to manufacturers. When they return, only the part numbers that are listed on the CoC's will be used in the CID.

Concurrence or comments are required at this Center within 45 days from the date of the letter. Late comments will be held for the next coordination of the document. Comments from military departments must be identified as either :Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians of this office, As applicable, in sufficient time to allow for consolidating the department reply.

The point of contact for this document is Mr. Earnest Brown. Defense Supply Center Columbus, DSCC-VAI, Post Office Box 3990, Columbus, OH. 43218-3990. Mr. Earnest Brown can be reached at 614-692-1568/850-1568, or by e-mail: to mailto:Earnest.Brown@dla.mil.

Sincerely,

/signed/

Howard E. H. Jenkins Acting Chief, Interconnection Devices Team CC:

DSCC-VSS (Ms. Beverly Wilson) DSCC-LDA (Mr. Brett Rippl)

DSCC-LEA (Mr. Art Levenstein)

DSCC-MEA (Mr. Dan Krist)

DSCC-AAB (Mr. Dan Patel)

DSCC-MED (Mr. Jay Nutt) DSCC-MEC (Mr. Walt Myers)

DSCC-MEA (Mr. Bob Trivett)

DSCC-CSAB (Mr. Don Groesbeck)

Army- MI, AV, AT Air Force-99, 71 Navy- SH,MC,SA NOTE: This draft, dated 24 May 2004, prepared by Defense Supply Center, Columbus, DSCC-VAI, 3990 East Broad Street, Columbus, OH 43218-3990, Has not been approved and is subjected to modification.

DO NOT USE PRIOR TO APPROVAL. (Project 4820-0868-000)

[INCH-POUND]
A-A-59440/5A
DRAFT
<u>SUPERSEDING</u>
A-A-59440/5
13 August 1999
MS35785B
30 March 1973

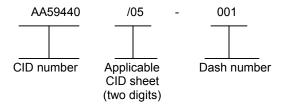
COMMERCIAL ITEM DESCRIPTION SPECIFICATION SHEET

COCK, DRAIN, GROUND KEY, 150 P.S.I. STEAM PRESSURE

The General Services Administration has authorized the use of this commercial item description (CID) for all federal agencies.

The complete requirements for procuring the cock drain ground key described herein shall consist of this document and the issue in effect of A-A-59440.

CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN). This CID uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example



SALIENT CHARACTERISTICS.

<u>General</u>. This slash sheet covers the requirements for cock, drain, ground key and bib nozzle in nominal sizes of 1/8 inch through 1 inch with NPTF threads. This item is for use in steam systems where pressures do not exceed 150 psig at 351 F degrees temperature.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: Defense Supply Center, Columbus, ATTN: DSCC-VAI, Post Office Box 3990, Columbus OH 43216-5000, or telephone (614) 692-0566, or facsimile (FAX) (614) 692-6939 or emailed to: construction@dscc.dla.mil. Since contact information can change you may want to verify the currency of this information using ASSIST Online database at http://www.dodssp.daps.mil.

AMSC N/A FSC 4820

<u>Interface and physical dimensions</u>. cock, drain, ground key , supplied to this CID shall be as specified herein see figure 1.

<u>Size</u>. The tables herein list the permissible variation in dimensions for each size. The external dimensions of the cocks should not limit procurement unless the end applications restrict these dimensions.

<u>PIN</u>. The PIN should be used for Government purposes to buy commercial products to CID. See classification information for PIN format example.

Source of documents

ASTM INTERNATIONAL

ASTM B 16/B 16M ASTM B 22 ASTM B 30 ASTM B 36/B 36M ASTM B 62	- - - -	Standard Specification for Free-Cutting Brass Rod, Bar and Shapes for Use in Screw Machines-Replaces ASTM B16M Standard Specification for Bronze Castings for Bridges and Turntables Standard Specification for Copper Alloys in Ingot Form Standard Specification for Brass Plate, Sheet, Strip, and Rolled Bar Standard Specification for Composition Bronze or Ounce Metal
ASTM B 61 ASTM B 121/B 121 M	-	Castings (Reinstated) Standard Specification for Steam or Valve Bronze Castings Standard Specification for Leaded Brass Plate, Sheet, Strip,
ASTM B 124/B 124M	-	and Rolled Bar Standard Specification for Copper and Copper Alloy Forging Rod, Bar, and Shapes
ASTM B 148 ASTM B 176	-	Standard Specification for Aluminum-Bronze Sand Castings Standard Specification for Copper-Alloy Die Castings
ASTM B 271 ASTM B 369 ASTM B 427	-	Standard Specification for Copper-Base Alloy Centrifugal Castings Standard Specification for Copper-Nickel Alloy Castings Standard Specification for Gear Bronze Alloy Castings
ASTM B 505 B/505M ASTM B 584	-	Standard Specification for Copper-Base Alloy Continuous Castings Standard Specification for Copper Alloy Sand Castings for General
ASTM B 763	-	Applications Standard Specification for Copper Alloy Sand Castings for Valve Application
ASTM B 770	-	Standard Specification for Copper-Beryllium Alloy Sand Castings for General Applications
ASTM B 806	-	Standard Specification for Copper Alloy Permanent Mold Castings for General Applications

(Copies of these documents are available from <u>WWW.astm.org</u> or ASTM International, 100 Barr Harbor Drive, west Conshohocken, PA. 19428-2959)

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

ASME B 1.20.3 - Dryseal Pipe Threads (Inch)-Revision and Redesignation of B2.2-1968

(Copies of these documents are available from www.asme.org or ASME information Central Orders/ Inquiries, P.O. Box 2300, Fairfield, NJ 07007-2300.)

A-A-59440/5A

SAE INTERNATIONAL

SAE AMS 4842D	-	Castings, Leaded Bronze, Sand and Centrifugal 80Cu - 10Sn - 9.5Pb a as Cast (UNS C93700)
SAE AMS 4845G	-	Tin Bronze Castings Sand and Centrifugal 87.5Cu - 10Sn - 2Zn as Cast
SAE AMS 4855F	-	Leaded Red Brass, Sand and Centrifugal Castings 85Cu - 5.0Sn - 5.0Pb - 5.0Zn as Cast UNS C83600
SAE AMS 4860E	-	Manganese Bronze, Sand and Centrifugal Castings 58Cu - 39Zn - 1.2 – 1.0Al –0.80 Mn as Cast UNS C86500
SAE AMS 4862F	-	Manganese Bronze, Sand and Centrifugal Castings 63Cu - 24Zn – 6.2Al - 3.8Mn - 3.0Fe High Strength, as Cast-UNS C86300
SAE AMS 4890B	-	Copper-Beryllium Alloy Castings 97Cu - 2.1Be - 0.52Co - 0.28Si Solution Heat Treated (TB00) (UNS C82500

(Copies of these documents are available online at $\underline{www.sae.org}$ or SAE World Headquarters 400 Commonwealth Drive Warrendale, PA 15096-0001 USA

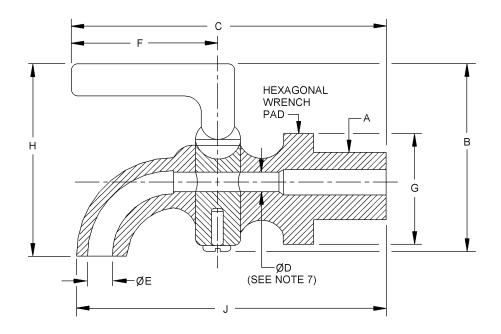


Figure I. Cock, Drain, Ground Key.

Dash	Α	В	С	D	E	F	G	J
Number	Pipe	MAX	MAX	DIA	DIA	MAX	ACROSS	MAX
	Thread			MIN	MIN		FLATS	
	NPTF						+/015	
021	1/8-27	1.81	2.75	.14	.19	1.38	.69 or .50	2.50
		(46.0)	(70.0)	(3.6)	(4.8)	(35.1)		(63.5)
022	1/4-18	1.81	2.75	.16	.22	1.38	.69 or .59	2.50
		(46.0)	(70.00	(3.6)	(5.6)	(35.1)		(63.5)
023	3/8-18	2.94	4.09	.25	.28	2.25	.86 or .78	3.44
		(74.7)	(103.9)	(6.4)	(7.1)	(57.2)		(87.4)
024	1/2-14	3.38	4.39	.31	.34	2.28	1.00 or .97	3.61
		(85.9)	(111.5)	(7.9)	(8.6)	(57.9)		(91.7)
025	3/4-14	3.80	4.81	.62	.56	2.50	1.25 or 1.06	4.50
		(96.5)	(122.2)	(15.8)	(14.2)	(63.5)		(114.3)
026	1-11-1/2	4.56	6.31	.97	.94	3.44	1.50 or 1.25	5.62
		(116.0)	(160.3)	(24.6)	(23.9)	(87.4)		(142.7)

NOTES:

- 1. <u>Material</u>. Brass conforming to: ASTM B16/B16 M, ASTM B22, ASTM B30, ASTM B 36/B 36 M, ASTM B 61, ASMT B62, ASTM B121/ B 121 M, ASTM B 124B/B A24 M, ASTM B176, ASTM B 148, ASTM B 271, ASTM B 369, ASTM B 505/B 505 M, ASTM B 584, ASTM B 763, ASTM B 770, or SAE AMS 4842DM, SAE AMS 4845G, SAE AMS 4855F, SAE AMS 4860E, SAE AMS 4862F, SAE AMS 4890B.
- 2. <u>Valve material</u>. Preference is ,ASTM B 61 Standard Specification for Steam or Valve Bronze Castings, since application is steam.
- 3. Protective Coating. Brass, none
- 4. <u>Threads</u>: Threads are Dryseal NPTF per ASME B1.20.3. Each of the letters in the symbols has a definite significance as follows: N = National (American) Standards; P = Pipe; T = Taper; F= Fuel and Oil. NPTF dryseal threads seal pressure tight joints without sealant compound. ANSI B1.20.3 explains the engineering principle and engineering design.
- 5. Tolerances. Unless otherwise specified tolerances +/- .010.
- 6. Test Pressures. Shell 300 psig, Seat 150 psig.
- 8. Hex Flat. Measurement across flats of Hexagonal Wrench Pad may be a standard measurement.
- 9. Optional designs. The illustration is for identification purposes only is not intended to restrict designs or shapes not dimensioned
- 10. <u>Dual dimensions</u>. Parenthetic metric dimensions are for references only
- 11. <u>Application</u>. This item is for use in steam systems where the pressure does not exceed 150 psig and temperatures at 351 degrees F
- 12. Drawing came from MS35785

Marginal notations are not used in this revision to identify changes due to the extent of the changes.

<u>Commercial Products</u>. As part of the market analysis and research effort, this CID was coordinated with the following manufacturers of commercial products. At the time of CID preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

86520 Conbraco Industries, Inc.

P.O. Box 247

Matthews, NC 28106-0247 Phone: (704) 841-6135 Conbraco Industries, Inc.

79470 Eaton Corp

14615 Loneoak Rd. Edenperry, MN 55344 952-294-2032/888-258-0222

jeffenoe@eaton.com

93061 Parker-Hannifin Corp

Brass Products Division

300 Parker Drive Otsego, MI 49708-1472 260-636-2104 dwsanders@Parker.com

20969

Essex Brass Corp 23500 Pinewood Warren, MI 48091-3122 586-757-8200 bpushman@essexbrass.com

<u>Part number (P/N) supersession data</u>. These CID P/Ns in table II supersede the following MFR's P/N's as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE II. P/N suppression data.

Dash number (see table I)	MFR's CAGE	MFG's P/N <u>I</u> /
AA59440ss1-001	See slash sheet	See slash sheet
AA59440ss2-001	See slash sheet	See slash sheet
AA59440ss3-001	See slash sheet	See slash sheet
AA59440ss4-001	See slash sheet	See slash sheet
AA59440ss5-001	See slash sheet	See slash sheet
AA59440ss6-001	See slash sheet	See slash sheet
AA59440ss7-001	See slash sheet	See slash sheet
AA59440ss8-001	See slash sheet	See slash sheet

^{1/} The manufacturer's P/N shall not be used for procurement to the requirements of this CID. At the time of preparation of this CID, the aforementioned commercial products reviewed and could be replaced by the CID PIN shown. For actual part marking requirements (see 3.10).

Marginal notations are not used in this revision to identify changes due to the extent of the changes.

MILITARY INTERESTS:

CIVIL AGENCIES AND COORDINATING ACTIVITIES: GSA – FSS

Custodians:

Army - AR Navy - SH Air Force - 99

DLA - CC

Preparing activity: DLA – CC

(Project 4820-0868-000)

Review activities: Army - AT, AV, MI NAVY – MC, SA

NOTE: The activities listed above were interested in this document as of the date of this document. Since organization and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at http://www.dodssp.daps.mil.